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RCPE/Scottish Renal Association Joint Symposium

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The RCPE/SRA Joint Symposium was held from 12–13 September 2014 at the Royal College of Physicians of Edinburgh

DECLARATION OF INTERESTS No conflict of interests declared.

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BACKGROUND

Renal medicine has grown rapidly over the last few decades due to the increased prevalence of patients with established renal failure. Despite this, there remains a paucity of randomised controlled trials within the specialty which can make management challenging. Constrained healthcare budgets, patients with increasing comorbidities, and shortages of donor organs present clinical and ethical dilemmas. The symposium was wide-ranging and sought to address some of these difficult decisions.

SESSION 1: ACUTE KIDNEY INJURY

The symposium commenced with case presentations, audits and research on the theme of acute kidney injury (AKI). Mr Paul Purvis (University of Glasgow) examined outcomes from ITU AKI in a single centre in patients with chronic kidney disease (CKD), demonstrating that patients in ITU requiring renal replacement therapy (RRT) have a high mortality, although their outcome was not affected by pre-existing CKD. Dr Samira Bell (Ninewells Hospital, Dundee) demonstrated a model to predict risk of AKI in patients undergoing orthopaedic surgery which, although in its infancy, may reduce AKI as a postoperative complication.

SESSION 2: STANLEY DAVIDSON ENDOWED LECTURE

Better outcomes for patients on long term haemodialysis – where do we go next?

Professor Ken Farrington (Lister Hospital, Stevenage) summarised the progress in management of end-stage renal disease, patient outcomes on haemodialysis and opportunities for improvement. Despite the principles of dialysis being described by Graham in the mid-1800s, it was not until the 1940s that Kolf constructed a working dialyser and the 1960s before the first outpatient dialysis centre was operational. Paradigm shifts and innovative technology have fuelled advances in haemodialysis. Despite increased uptake of RRT over the last 20–30 years, patient outcomes on haemodialysis and patients' experience remain poor. Five-year survival is worse than a patient with kidney or colorectal cancer.[1] Dialysis patients report lack of energy, drowsiness, pain, breathlessness and anorexia. Dialysis itself is arduous and significant amounts of time are spent travelling (and waiting for transport) to the dialysis unit. Depression[2] and an enormous 'pill burden' are common. Tailoring dialysis prescriptions to the individual and embracing new technologies can help address patient experience and outcome.

SESSION 3: CHRONIC KIDNEY DISEASE – EVERYDAY DIFFICULT DECISIONS

The prevalence of diabetes is rising and around 30% of diabetics develop diabetic nephropathy. An interactive case on the management of diabetic CKD helped Dr Nicola Joss (Raigmore Hospital, Inverness) disseminate evidence for management of diabetic nephropathy. Dual blockade of the renin-angiotensin-system with ACE inhibitor (ACEi) and angiotensin receptor blockers (ARB) to address surrogate endpoint targets such as proteinuria and blood pressure appears logical. However, large trials have demonstrated an increase in adverse events, including hyperkalaemia and hypotension without clinical benefit compared to mono-therapy.[3] The Medicine and Healthcare products Regulatory Agency now advises against dual blockade. Patients taking ACEi/ARB should avoid concurrent use with nephrotoxins and be informed to temporarily stop taking ACEi/ARB on 'sick days' to avoid risk of AKI.

A second interactive case allowed Dr Siobhan McManus (Western Infirmary, Glasgow) to highlight some challenges in RRT options for diabetic patients. Diabetics face increased complications from higher cardiovascular risk and more bacterial and fungal infection following transplant, while immunosuppresive medications worsen diabetic control. Significant comorbidities, including inoperable coronary vascular disease, may preclude transplant entirely. Daily home haemodialysis is preferential to thrice weekly hospital haemodialysis,[4] although this is predicated on patient motivation and perceived quality of life. Peritoneal dialysis and conservative management should also be considered.

SESSION 4: DEBATE – A BODY MASS INDEX OF >35KG/M2 IS ALWAYS A CONTRAINDICATION TO RENAL TRANSPLANTATION

Proposing the motion, Mr Ian Currie (Royal Infirmary, Edinburgh) highlighted the technical difficulties of performing renal transplantation in bariatric patients, outlining increased postoperative complications including wound infection/dehiscence, delayed graft function, sepsis, allograft nephropathy and graft failure. Against the motion, Dr Drew Henderson (Ninewells Hospital, Dundee) explained that most patients are unable to lose enough weight pre-operatively and that bariatric weight-loss surgery is equally complicated. While acknowledging the complications, he outlined that risk factors for survival following transplantation included age, dialysis vintage, diabetes and smoking but that BMI>35 does not infer increased risk.[5] The delegates voted against the motion.

ISLET CELL TRANSPLANTATION

Mr John Casey (Royal Infirmary, Edinburgh) provided an overview of this emerging transplantation sub-specialty in Scotland. Having completed the first transplant in February 2011, the team have since performed 33 infusions on 18 patients, demonstrating reduction in hypoglycaemia, insulin requirement and BMI.

TAKE HOME MESSAGE

The symposium provided a broad overview of challenges to the nephrologist. It is clear that a 'one-size fits all' approach is unsuitable and that CKD management and RRT must be tailored to the individual patient. Modern technologies and treatments are emerging, which may help to improve patient experience and outcome.

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